

REMARKS

Claims 1-48 are pending in the application. Applicants gratefully acknowledge the Examiner's indication that claims 22-28 have been allowed. On the other hand, applicants respectfully disagree with the rejection of claims 1-21 and 29-48. As reported in the office action, the Examiner has rejected claims 1, 3-5 and 8-20 under 35 USC § 102(b), as being anticipated by Amerga et al. (Pub. No. 2002/0115448). The remaining rejected claims have been rejected under 35 USC § 103(a) as being directed to subject matter that would have been obvious from Amerga et al. in view of Hockley, Jr. et al. (Pub. No. 2004/0008138), Zadeh et al. (U.S. Patent No. 6,266,533), and Fischer et al. (U.S. Patent No. 6,295,455).

Before discussing the Office Action, applicants' undersigned attorney would like to thank Examiner Phuong for participating in a telephonic interview on this date (Feb. 12, 2008). In the interview, we generally discussed the above amendments and how the independent claims, as a whole, were patentably distinguished over the prior art of record, with a primary focus on the Amerga et al. reference. The examiner seemed generally satisfied with our explanation but indicated that further consideration would be required before deciding whether to allow the claims. In addition, the examiner was invited to call applicants' attorney at 206 332-1384 to discuss any issues that might remain after the present amendment is entered and more fully considered by the examiner.

Claims 1 and 11 have been hereby amended to clarify the claimed subject matter. The Examiner is respectfully urged to reconsider the application and to withdraw the rejections. As explained below, applicants respectfully submit that the principal reference, Amerga et al., fail to teach or suggest all of the limitations of applicants' independent claims, and therefore the rejections under §§ 102(b) and 103(a) are improper.

Each of applicants' independent claims (claims 1, 11, 29, and 39) includes a recitation concerning the claimed invention's advantageous use of the inherent communications facilities in the MS device and the infrastructure technology. In particular, as explained in paragraph 0004 of applicants' specification, the infrastructure technology establishes the facility to locate the mobile units through the measurement of location-related signal characteristics inherent in the *normal communications-band transmission*. Thus, legacy phone models as well as newly

emerging wireless communications units can all be served with the location facilities. The mobile units need only employ the standard wireless communications signal formats and protocols, and do not require special, localization-specific modification to support the location capability. As further explained in paragraph 0020 of the specification, the inherent communications facilities in the MS device as well as in the communications systems infrastructure equipment deployed at land station sites provide communications-band signals that are processed for the calculation of location-related parameters. The infrastructure-based signal characteristics include times or time differences of arrival, angles of arrival, signal power levels, and communications-system timing advance information for the MS of interest.

Turning now to applicants' claims, claim 1 recites:

(b) at a land station equipped with location-measurement facilities, receiving a communications-band signal from said MS to be located and ***using the location-measurement facilities to extract location-related characteristic data from the communications-band signal ...*** . [Emphasis supplied.]

Similar recitations appear in independent claims 11, 29 and 39. For example, claim 11 recites:

(b) a land station equipped with location-measurement facilities and a receiver for receiving from said MS to be located a wireless communications-band signal and ***using the location-measurement facilities to extract location-related characteristic data from the communications-band signal ...*** . [Emphasis supplied.]

Moreover, independent claims 1 and 11 have been amended to clarify that the recited location-related characteristic data extracted from the communications-band signal ***is a function of the geographic location of said MS relative to said land station equipped with location-measurement facilities***. Accordingly, with regard to claims 1 – 21, an aspect of applicants' claimed invention is the use of ***location-measurement facilities at a land station to extract location-related characteristic data from communications-band signals***. Since the extracted data is a function of the location of the MS relative to the land station, this is different from measuring TOA data at the MS, and the extracted "location-related characteristic data" should not be construed to encompass the approach of measuring TOA at the MS and forwarding this to

a land station. Rather, the claimed approach is to extract such location-related characteristic data from communications-band signals.

In this regard, the Examiner has cited to the Amerga et al. publication, at Figure 1 and paragraphs 0032 to 0042. However, applicants respectfully submit that a careful reading of Amerga et al. reveals that Amerga discloses that a remote terminal 106 measures the arrival times of transmissions from a number of base stations 104, and these arrival times are then communicated to a position determining entity (PDE) 130. Remote terminal 106 of Amerga et al. appears to correspond to applicants' claimed mobile station (MS) to be located. Accordingly, according to Amerga et al., the MS to be located determines the times of arrival of transmissions from the base stations, and communicates these times to the PDE 130. The communications from Amerga's remote terminal/MS are not disclosed as being "communications-band signals," nor are these used to extract location-related characteristic data as recited in applicants' claims. Thus, Amerga's approach is different from that recited in applicants' claims. According to applicants' claimed invention, a *land station* equipped with location-measurement facilities receives the *communications-band signals* from the MS to be located and uses the location-measurement facility *to extract location-related characteristic data*.

Accordingly, for the foregoing reasons, applicants respectfully disagree with the Examiner's position that Amerga et al. anticipates claim 1 and the other independent claims, *i.e.*, 11, 29 and 39. For this reason, we respectfully submit that the rejections under §§ 102(b) and 103(a) should be withdrawn.

Respectfully submitted,

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/Michael D. Stein/
Michael D. Stein
Registration No. 34,734

Woodcock Washburn LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439